

§ 595.6

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(C) Shall remain illuminated for the entire time that the air bag is “off;”

(D) Shall not be illuminated at any time when the air bag is “on;” and,

(E) Shall not be combined with the readiness indicator required by S4.5.2 of § 571.208 of this chapter.

(4) The dealer or motor vehicle repair business provides the owner or lessee with an insert for the vehicle owner’s manual that—

(i) Describes the operation of the on-off switch,

(ii) Lists the risk groups on the request form set forth in Appendix B of this Part,

(iii) States that an on-off switch should only be used to turn off an air bag for a member of one of those risk groups, and

(iv) States the safety consequences for using the on-off switch to turn off an air bag for persons who are not members of any of those risk groups. The description of those consequences includes information, specific to the make, model and model year of the owner’s or lessee’s vehicle, about any seat belt energy managing features, e.g., load limiters, that will affect seat belt performance when the air bag is turned off.

(5) In the form included in the agency authorization letter specified in paragraph (b)(1) of this section, the dealer or motor vehicle repair business fills in information describing itself and the on-off switch installation(s) it makes in the motor vehicle. The dealer or motor vehicle repair business then sends the form to the address below within 7 working days after the completion of the described installations: National Highway Traffic Safety Administration, Attention: Air Bag Switch Request Forms, 400 Seventh Street, S.W., Washington, D.C. 20590–1000.

[62 FR 62442, Nov. 21, 1997; 62 FR 67754, Dec. 30, 1997, as amended at 65 FR 30770, May 12, 2000; 69 FR 31034, June 2, 2004]

Subpart C—Vehicle Modifications To Accommodate People With Disabilities

SOURCE: 66 FR 12655, Feb. 27, 2001, unless otherwise noted.

§ 595.6 Modifier identification.

(a) Any motor vehicle repair business that modifies a motor vehicle to enable a person with a disability to operate, or ride as a passenger in, the motor vehicle and intends to avail itself of the exemption provided in 49 CFR 595.7 shall furnish the information specified in paragraphs (a)(1) through (3) of this section to: Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, SW., Washington, DC 20590.

(1) Full individual, partnership, or corporate name of the motor vehicle repair business.

(2) Residence address of the motor vehicle repair business and State of incorporation if applicable.

(3) A statement that the motor vehicle repair business modifies a motor vehicle to enable a person with a disability to operate, or ride as a passenger in, the motor vehicle and intends to avail itself of the exemption provided in 49 CFR 595.7.

(b) Each motor business repair business required to submit information under paragraph (a) of this section shall submit the information not later than August 27, 2001. After that date, each motor business repair business that modifies a motor vehicle to enable a person with a disability to operate, or ride as a passenger in, the motor vehicle and intends to avail itself of the exemption provided in 49 CFR 595.7 shall submit the information required under paragraph (a) not later than 30 days after it first modifies a motor vehicle to enable a person with a disability to operate, or ride as a passenger in, the motor vehicle. Each motor vehicle repair business who has submitted required information shall keep its entry current, accurate and complete by submitting revised information not later than 30 days after the relevant changes in the business occur.

§ 595.7 Requirements for vehicle modifications to accommodate people with disabilities.

(a) Any motor vehicle repair business that modifies a motor vehicle to enable a person with a disability to operate, or ride as a passenger in, the motor vehicle is exempted from the “make inoperative” prohibition of 49 U.S.C.

30122 to the extent that those modifications affect the motor vehicle's compliance with the Federal motor vehicle safety standards or portions thereof specified in paragraph (c) of this section. Modifications that would take a vehicle out of compliance with any other Federal motor vehicle safety standards, or portions thereof, are not covered by this exemption.

(b) Any motor vehicle repair business that modifies a motor vehicle to enable a person with a disability to operate, or ride as a passenger in, the motor vehicle in such a manner as to make inoperative any part of a device or element of design installed on or in the motor vehicle in compliance with a Federal motor vehicle safety standard or portion thereof specified in paragraph (c) of this section must affix to the motor vehicle a permanent label of the type and in the manner described in paragraph (d) of this section and must provide and retain a document of the type and in the manner described in paragraph (e) of this section.

(c)(1) 49 CFR 571.101, except for S5.2(a), S5.3.1, S5.3.2, and S5.3.5 of that section.

(2) S5.1.1.5 of 49 CFR 571.108, in the case of a motor vehicle that is modified to be driven without a steering wheel or for which it is not feasible to retain the turn signal canceling device installed by the vehicle manufacturer.

(3) S4.4 and S4.5 of 49 CFR 571.114, in any case in which the original key-locking system must be modified.

(4) S4(a) of 49 CFR 571.118, in any case in which the medical condition of the person for whom the vehicle is modified necessitates the installation of a remote ignition switch to start the vehicle.

(5) S5.1 and S5.2.1 of 49 CFR 571.123, in any case in which the modification necessitates the relocation of original equipment manufacturer's controls.

(6) S5.3.1 of 49 CFR 571.135, in any case in which the modification necessitates the removal of the original equipment manufacturer foot pedal.

(7) 49 CFR 571.201 with respect to:

(i) Targets located on the right side rail, the right B-pillar and the first right side "other" pillar adjacent to the stowed platform of a lift or ramp

that stows vertically, inside the vehicle.

(ii) Targets located on the left side rail, the left B-pillar and the first left side "other" pillar adjacent to the stowed platform of a lift or ramp that stows vertically, inside the vehicle.

(iii) Targets located on the rear header and the rearmost pillars adjacent to the stowed platform of a lift or ramp that stows vertically, inside the vehicle.

(iv) Targets located on any hand grip or vertical stanchion bar.

(v) All of S6 of 571.201 in any case in which the disability necessitates raising the roof or door, or lowering the floor of the vehicle.

(8) 49 CFR 571.202, in any case in which:

(i) A motor vehicle is modified to be operated by a driver seated in a wheelchair and no other seat is supplied with the vehicle for the driver;

(ii) A motor vehicle is modified to transport a right front passenger seated in a wheelchair and no other right front passenger seat is supplied with the vehicle; or

(9) S4.3(b)(1) and (2) of 49 CFR 571.202, in any case in which the driver's head restraint must be modified to accommodate a driver with a disability.

(10) S5.1 of 49 CFR 571.203, in any case in which the modification necessitates a structural change to, or removal of, the original equipment manufacturer steering shaft.

(11) S5.2 of 49 CFR 571.203, in any case in which an item of adaptive equipment must be mounted on the steering wheel.

(12) 49 CFR 571.204, in any case in which the modification necessitates a structural change to, or removal of, the original equipment manufacturer steering shaft.

(13) S4.1 of 49 CFR 571.207, in any case in which a vehicle is modified to be driven by a person seated in a wheelchair and no other driver's seat is supplied with the vehicle, provided that a wheelchair securement device is installed at the driver's position.

(14) S4.1.5(a)(1), S4.1.5.1(a)(3), S4.2.6.2, S5, S7.1, S7.2, S7.4, S14, S15, S16, S17, S18, S19, S20, S21, S22, S23, S24, S25, S26

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and S27 of 49 CFR 571.208 for the designated seating position modified, provided Type 2 or Type 2A seat belts meeting the requirements of 49 CFR 571.209 and 571.210 are installed at that position.

(15) S5 of 49 CFR 571.214 for the designated seating position modified, in any cases in which the restraint system and/or seat at that position must be changed to accommodate a person with a disability.

(16) 49 CFR 571.225 in any case in which an existing child restraint anchorage system, or built-in child restraint system relied upon for compliance with 571.225 must be removed to accommodate a person with a disability, provided the vehicle contains at least one tether anchorage which complies with 49 CFR 571.225 S6, S7 and S8 in one of the rear passenger designated seating positions. If no rear designated seating position exists after the vehicle modification, a tether anchorage complying with the requirements described above must be located at a front passenger seat. Any tether anchorage attached to a seat that is relocated shall continue to comply with the requirements of 49 CFR 571.225 S6, S7 and S8.

(d) The label required by paragraph (b) of this section shall:

(1) Be permanently affixed to the vehicle,

(2) Be located adjacent to the original certification label or the alterer's certification label, if applicable,

(3) Give the modifier's name and physical address,

(4) Contain the statement "This vehicle has been modified in accordance with 49 CFR 595.6 and may no longer comply with all Federal Motor Vehicle Safety Standards in effect at the time of its original manufacture."

(e) The document required by paragraph (b) of this section shall:

(1) Be provided, in original or photocopied form, to the owner of the vehicle at the time the vehicle is delivered to the owner,

(2) Be kept, in original or photocopied form, at the same address provided on the label described in paragraph (c) of this section for a period not less than five years after the vehicle, as modified, is delivered to the individual for whom the modifications were performed,

(3) Be clearly identifiable as to the vehicle that has been modified,

(4) Contain a list of the Federal motor vehicle safety standards or portions thereof specified in paragraph (c) of this section with which the vehicle may no longer be in compliance.

(5) Indicate any reduction in the load carrying capacity of the vehicle of more than 100 kg (220 lb) after the modifications are completed. In providing this information, the modifier must state whether the weight of a user's wheelchair is included in the available load capacity.

[66 FR 12655, Feb. 27, 2001, as amended at 69 FR 21069, Apr. 20, 2004; 70 FR 51678, Aug. 31, 2005]

APPENDIX A TO PART 595—INFORMATION BROCHURE

APPENDIX A TO PART 595--INFORMATION BROCHURE



U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

AIR BAGS AND ON-OFF SWITCHES INFORMATION FOR AN INFORMED DECISION

Keeping the Benefits for the Many and Reducing the Risks for the Few

INTRODUCTION

Air bags are proven, effective safety devices. From their introduction in the late 1980's through November 1, 1997, air bags saved about 2,620 people. The number of people saved increases each year as air bags become more common on America's roads.

However, the number of lives saved is not the whole story. Air bags are particularly effective in preventing life-threatening and debilitating head and chest injuries. A study of real-world crashes conducted by the National Highway Traffic Safety Administration (NHTSA) found that the combination of seat belts and air bags is 75 percent effective in preventing serious head injuries and 66 percent effective in preventing serious chest injuries. That means 75 of every 100 people who would have suffered a serious head injury in a crash, and 66 out of 100 people who would have suffered chest injuries, were spared that fate because they wore seat belts and had air bags.

For some people, these life saving and injury-preventing benefits come at the cost of a less severe injury caused by the air bag itself. Most air bag injuries are minor cuts, bruises, or abrasions and are far less serious than the skull fractures and brain injuries that air bags prevent. However, 87 people have been killed by air bags as of November 1, 1997. These deaths are tragic, but rare events -- there have been about 1,800,000 air bag deployments as of that same date.

The one fact that is common to all who died is NOT their height, weight, sex, or age. Rather, it is the fact that they were too close to the air bag when it started to deploy. For some, this occurred because they were sitting too close to the air bag. More often this occurred because they were not restrained by seat belts or child safety seats and were thrown forward during pre-crash braking.

The vast majority of people can avoid being too close and can minimize the risk of serious air bag injury by making simple changes in behavior. Shorter drivers can adjust their seating position. Front seat adult passengers can sit a safe distance from their air bag. Infants and children 12 and under should sit in the back seat. And everyone can buckle up. The limited number of people who may not be able to make these changes may benefit from having the opportunity to turn off their air bags when necessary.

Beginning January 19, 1998, consumers can choose to have an on-off switch installed for the air bags in their vehicle if they are, or a user of their vehicle is, in a risk group listed below. The following information provides the facts you need about air bags so you can make the appropriate decision for you and anyone else who is in a risk group.

What is an on-off switch?

An on-off switch allows an air bag to be turned on and off. The on-off switch can be installed for the driver, passenger, or both. To limit misuse, a key must be used to operate the on-off switch. When the air bag is turned off, a light comes on. There is a message on or near the light saying “DRIVER AIR BAG OFF” or “PASSENGER AIR BAG OFF.” The air bag will remain off until the key is used to turn it back on.

What steps can you take to reduce air bag risk without buying an on-off switch?

- **Always place an infant in a rear-facing infant seat in the back seat.**
- **Always transport children 1 to 12 years old in the back seat and use appropriate child restraints.**
- **Always buckle your seat belt.**
- **Keep 10 inches between the center of the air bag cover and your breastbone.**

The vast majority of people don't need an on-off switch. Almost everyone over age 12 is much safer with air bags than without them. This includes short people, tall people, older people, pregnant women -- in fact, all people, male or female, who buckle their seat belts and who can sit far enough back from their air bag. Ideally, you should sit with at least 10 inches between the center of your breastbone and the cover of your air bag. The nearer you can come to achieving the 10-inch distance, the lower your risk of being injured by the air bag and the higher your chance of being saved by the air bag. If you can get back almost 10 inches, the air bag will still help you in a crash.

Who should consider installing an on-off switch?

- People who must transport infants riding in rear-facing infant seats in the front passenger seat.
- People who must transport children ages 1 to 12 in the front passenger seat.
- Drivers who cannot change their customary driving position and keep 10 inches between the center of the steering wheel and the center of their breastbone.
- People whose doctors say that, due to their medical condition, the air bag poses a special risk that outweighs the risk of hitting their head, neck or chest in a crash if the air bag is turned off.

If you cannot certify that you are, or any user of your vehicle is, in one of these groups, you are not eligible for an on-off switch. Turning off your air bag will not benefit you or the other users of your vehicle. Instead, it will increase the risk that you and the other users will suffer a head, neck or chest injury by violently striking the steering wheel or dashboard in a moderate to severe

crash.

WHY SOME PEOPLE ARE AT RISK

How do air bag deaths occur?

Air bags are designed to save lives and prevent injuries by cushioning occupants as they move forward in a front-end crash. By providing a cushion, an air bag keeps the occupant's head, neck, and chest from hitting the steering wheel or dashboard. To perform well, an air bag must deploy quickly. The force is greatest in the first 2-3 inches after the air bag bursts through its cover and begins to inflate. Those 2-3 inches are the "risk zone." The force decreases as the air bag inflates farther.

Occupants who are very close to or on top of the air bag when it begins to inflate can be hit with enough force to suffer serious injury or death. However, occupants who are properly restrained and sit 10 inches away from the air bag cover will contact the air bag only after it has completely or almost completely inflated. The air bag then will cushion and protect them from hitting the hard surfaces in the vehicle.

Do both children and adults face risk?

Yes, both children and adults face the risk of air bag injury or death if they are positioned too close to the air bag or fail to use proper restraints. As of November 1, 1997, NHTSA has confirmed that 49 young children have died, all on the passenger side. 38 adults have died -- 35 drivers and 3 passengers.

What were the specific circumstances of the children's deaths?

Almost all of the 49 children who died were improperly restrained or positioned. 12 were infants under age 1 who were riding in rear-facing infant seats in front of the passenger air bag. When placed in the front seat, a rear-facing infant seat places an infant's head within a very few inches of the passenger air bag. In this position, an infant is almost certain to be injured if the air bag deploys. Rear-facing infant seats must ALWAYS be placed in the back seat.

The other 37 children ranged in age from 1 to 9 years; most were 7 or under. 29 of them were totally unrestrained. This includes 4 children who were sitting on the laps of other occupants. The remaining 8 children included some who were riding with their shoulder belts behind them and some who were wearing lap and shoulder belts but who also should have been in booster seats because of their small size and weight. Booster seat use could have improved shoulder belt fit and performance. These various factors allowed the 37 children to get too close to the air bag when it began to inflate.

What were the specific circumstances of the adults' deaths?

Most of the adults who were killed by air bags were not properly restrained. 18 of the 35 drivers, and 2 of the 3 passengers, were totally unbelted. 2 of the drivers who were belted had medical conditions which caused them to slump over the steering wheel immediately before the crash. A few of the drivers did not use their seat belts correctly and the others are believed to have been sitting too close to the steering wheel.

SEE FOR YOURSELF

Visit the NHTSA Web site at <http://www.nhtsa.dot.gov> and click on the icon “AIR BAGS - Information about air bags.” A video shows crash tests of properly belted dummies whose air bags are turned off. A properly belted short female dummy without an air bag is shown slamming her head hard enough to bend the steering wheel and suffer fatal injuries. For more information, call the NHTSA Hotline at 1-800-424-9393.

REDUCING THE RISK**What is the safest way to ride in front of an air bag?**

First, move the seat back and buckle up -- every time, every trip. The lap belt needs to fit over your hips, not your abdomen, and the shoulder belt should lie on your chest and over your shoulder. Remove any slack from the belt. In a crash, seat belts stretch and slow down your movement toward the steering wheel or dashboard. Moving back and properly using seat belts give the air bag a chance to inflate before you move forward in a crash far enough to contact the air bag.

How do I best protect children?

Never place a rear-facing infant seat in the front seat if the air bag is turned on. Always secure a rear-facing seat in the back seat. Children age 12 and under should ride in the back seat. While almost all of the children killed by an air bag were 7 years old or younger, a few older children have been killed. Accordingly, age 12 is recommended to provide a margin of safety.

There are instances when children must sit in the front because the vehicle has no rear seat, there are too many children for all to ride in back, or a child has a medical condition that requires monitoring. If children must sit in the front seat, they should use the seat belts and/or child restraint appropriate for their weight or size (see the table at the end of this brochure) and sit against the back of the vehicle seat. The vehicle seat should be moved as far back from the air bag as practical. Make sure the child's shoulder belt stays on. If adult seat belts do not fit properly, use a booster seat. Also, children must never ride on the laps of others.

What should teenagers and adults do to be safest on the passenger side?

Always wear seat belts. This reduces the distance that they can move forward during a crash. Move the seat toward the rear. The distance between a passenger's chest and the dashboard where the air bag is stored is usually more than 10 inches, even with the passenger seat all the way forward. But more distance is safer.

How do I stay safe when I'm driving?

Since the risk zone for driver air bags is the first 2-3 inches of inflation, placing yourself 10 inches from your driver air bag provides you with a clear margin of safety. This distance is measured from the center of the steering wheel to your breastbone. If you now sit less than 10 inches away, you can change your driving position in several ways:

- Move your seat to the rear as far as you can while still reaching the pedals comfortably.

- Slightly recline the back of the seat. Although vehicle designs vary, many drivers can achieve the 10-inch distance, even with the driver seat all the way forward, simply by reclining the back of the seat somewhat. If reclining the back of your seat makes it hard to see the road, raise yourself by using a firm, non-slippery cushion, or raise the seat if your vehicle has that feature.
- If your steering wheel is adjustable, tilt it downward. This points the air bag toward your chest instead of your head and neck.

[In its published version, the brochure will be 10 inches tall and will indicate that it should be placed between your breastbone and the center of the air bag cover to check your distance.]

Will following these safety tips guarantee that I will be safe in a crash?

There is no guarantee of safety in a crash, with or without an air bag. However, most of the people killed by air bags would not have been seriously injured if they had followed these safety tips.

Are air bags the reason the back seat is the safest place for children?

No. The back seat has always been safer, even before there were air bags. NHTSA conducted a study of children who died in crashes in the front and back seats of vehicles, very few of which had passenger air bags. The study concluded that placing children in the back reduces the risk of death in a crash by 27 percent, whether or not a child is restrained.

THE ON-OFF SWITCH DECISION

Vehicle owners and lessees can obtain an on-off switch for one or both of their air bags only if they can certify that they are, or a user of their vehicle is, in one of the four risk groups listed below:

Two risk groups have a high enough risk that they would definitely be better off with an on-off switch:

- **Infants in rear-facing infant seats.** A rear-facing infant seat must never be placed in the front seat unless the air bag is turned off.
- **Drivers or passengers with unusual medical conditions.** These are people who have been advised by a physician that an air bag poses a special risk to them because of their condition. However, they should not turn off their air bag unless their physician also has advised them that this risk is greater than what may happen if they do turn off their air bag. Without an air bag, even belted occupants could hit their head, neck or chest in a crash.

A national conference of physicians considered all medical conditions commonly cited as possible justifications for turning off air bags. The physicians did not recommend turning off air bags for persons with pacemakers, supplemental oxygen, eyeglasses, median sternotomy, angina, chronic obstructive pulmonary disease, emphysema, asthma, breast reconstruction, mastectomy, scoliosis (if the person can be positioned properly), previous back or neck surgery, previous facial reconstructive surgery or facial injury, hyperacusis, tinnitus, advanced age,

osteogenesis imperfecta, osteoporosis & arthritis (if the person can sit at a safe distance from the air bag), previous ophthalmologic surgery, Down syndrome and atlantoaxial instability (if the person can reliably sit properly aligned), or pregnancy. The physicians recommended turning off an air bag if a safe sitting distance or position cannot be maintained by a driver because of scoliosis or achondroplasia or by a passenger because of scoliosis or Down syndrome and atlantoaxial instability. The physicians also noted that a passenger air bag might have to be turned off if an infant or child has a medical condition and must ride in front so that he or she can be monitored. To obtain a copy of the recommendations, call the NHTSA Hotline or see the NHTSA Web site.

Two other risk groups may be better off with an air bag on-off switch:

- **Children ages 1 to 12.** Children in this age group can be transported safely in the front seat if they are properly belted, they do not lean forward, and their seat is moved all the way back. The vast majority of all fatally injured children in this age range were completely unrestrained. But children sometimes sit or lean far forward and may slip out of their shoulder belts, putting themselves at risk. The simple act of leaning far forward to change the radio station can momentarily place even a belted child in danger. If a vehicle owner must transport a child in the front seat, the owner is eligible for an on-off switch for the passenger air bag. Since air bag performance differs from vehicle model to vehicle model, the vehicle owner may wish to consult the vehicle manufacturer for additional advice.

CAUTION: If you allow children to ride in the front seat while unrestrained or improperly restrained, and especially if you sit with a child on your lap, **you are putting them at serious risk, with or without an air bag**. Turning off the air bag is not the safe answer. It would eliminate air bag risk but not the likelihood that in a crash an unrestrained child would fly through the air and strike the dashboard or windshield, or be crushed by your body.

- **Drivers who cannot get back 10 inches.** Very few drivers are unable to sit so that their breastbone is 10 inches away from their air bag. If, despite your best efforts, you cannot maintain a distance of 10 inches, you may wish to **consult your dealer or vehicle manufacturer for advice or modifications to help you move back**.

Since the risk zone is the first 2-3 inches from the air bag cover, sitting back 10 inches provides a clear margin of safety. While getting back at least 10 inches is desirable, if you can get back almost 10 inches, the air bag is unlikely to seriously injure you in a crash and you probably don't need an on-off switch. If you cannot get back almost 10 inches from the air bag cover, you may wish to consider an on-off switch. Since air bag performance differs among vehicle models, you may wish to consult your vehicle manufacturer for additional advice.

What if you are, or a user of your vehicle is, not in one of the listed risk groups?

You are not at risk and do not need an on-off switch. This includes short people, tall people, older people, pregnant women -- in fact, all people, male or female over age 12, who buckle their seat belts and who can sit with 10 inches from the center of their breastbone to where the air bag is stored. You will have the full benefit of your air bag and will minimize the risk of violently striking the steering wheel and dashboard in a moderate to severe crash.

How do I get an on-off switch?

If you are eligible, you must fill out a NHTSA request form. Forms are available at state motor vehicle offices and may be available at automobile dealers and repair shops. You may also get one by calling the NHTSA Hotline or visiting the NHTSA Web site. On the form, you must indicate which air bags you want equipped with an on-off switch, certify that you have read this information brochure, certify that you are, or a user of your vehicle is, a member of a risk group listed above, and identify the group. Then send this form to NHTSA. Upon approval of your request, the agency will send you a letter authorizing an automobile dealer or repair shop to install an on-off switch in your vehicle.

Should a pregnant woman get an on-off switch?

No, not unless she is a member of a risk group. Pregnant women should follow the same advice as other adults: buckle up and stay back from the air bag. The lap belt should be positioned low on the abdomen, below the fetus, with the shoulder belt worn normally. Pull any slack out of the belt. Just as for everyone else, the greatest danger to a pregnant woman comes from slamming her head, neck or chest on the steering wheel in a crash. When crashes occur, the fetus can be injured by striking the lower rim of the steering wheel or from crash forces concentrated in the area where a seat belt crosses the mother's abdomen. By helping to restrain the upper chest, the seat belt will keep a pregnant woman as far as possible from the steering wheel. The air bag will spread out the crash forces that would otherwise be concentrated by the seat belt.

ON-OFF SWITCH PRECAUTIONS**If I turn off my air bag for someone at risk, what precautions should I take for others?**

Since the air bag will not automatically turn itself back on after you turn it off with an on-off switch, you must remember to turn it on when someone who is not at risk is sitting in that seat. Every on-off switch has a light to remind you when the air bag is turned off.

If I turn off my air bag, will my seat belts provide enough protection?

Air bags increase the protection you can get from seat belts alone. If the air bag is turned off, you lose this extra protection.

In some newer vehicles, turning off your air bag may have additional consequences. These vehicles have seat belts that were specially designed to work together with air bags. If the crash forces become too great, these new seat belts "give" or yield to avoid concentrating too much force on your chest. The air bag prevents you from moving too far forward after the seat belts

give. Without the air bag to cushion this forward movement, the chance of the occupant hitting the vehicle interior is increased.

Ask your vehicle manufacturer whether your seat belts were specially designed to work with an air bag. If they were, your dealer or repair shop will provide you information about the effects that turning off your air bag will have on the performance of the belts. Ask your dealer or repair shop to show you this information before you decide whether to have an on-off switch installed.

HOW AIR BAGS WORK

Air bags are designed to keep your head, neck, and chest from slamming into the dash, steering wheel or windshield in a front-end crash. They are not designed to inflate in rear-end or rollover crashes or in most side crashes. Generally, air bags are designed to deploy in crashes that are equivalent to a vehicle crashing into a solid wall at 8-14 mph. Air bags most often deploy when a vehicle collides with another vehicle or with a solid object like a tree.

Air bags inflate when a sensor detects a front-end crash. The sensor sends an electric signal to start a chemical reaction that inflates the air bag with harmless nitrogen gas. All this happens faster than the blink of an eye. Air bags have vents, so they deflate immediately after cushioning you. They cannot smother you and they don't restrict your movement. The "smoke" you may have seen in a vehicle after an air bag demonstration is the nontoxic starch or talc that is used to lubricate the air bag.

Are all air bags the same?

No. Air bags differ in design and performance. There are differences in the crash speeds that trigger air bag deployment, the speed and force of deployment, the size and shape of air bags, and the manner in which they unfold and inflate. That is why you should contact your vehicle manufacturer if you want specific information about the air bags in your particular car or truck.

FUTURE AIR BAGS

Do I need an on-off switch if I buy a vehicle with depowered air bags?

Many manufacturers are installing depowered air bags beginning with their model year 1998 vehicles. They are called "depowered" because they deploy with less force than current air bags. They will reduce the risk of air bag-related injuries. However, even with depowered air bags, rear-facing child seats still should never be placed in the front seat and children are still safest in the back seat. Contact your vehicle manufacturer for further information.

Will on-off switches be necessary in the future?

Manufacturers are actively developing so-called "smart" or "advanced" air bags that may be able to tailor deployment based on crash severity, occupant size and position, or seat belt use. These bags should eliminate the risks produced by current air bag designs. It is likely that vehicle manufacturers will introduce some form of advanced air bags over the next few years.

WHAT RESTRAINT IS RIGHT FOR YOUR CHILD?

Weight or size of your child	Proper type of restraint (Put your child in back seat, if possible)
Children less than 20 pounds,* or less than 1 year	Rear-facing infant seat <i>(secured to the vehicle by the seat belts)</i>
Children from about 20 to 40 pounds* and at least 1 year	Forward-facing child seat <i>(secured to the vehicle by the seat belts)</i>
Children more than 40 pounds*	Booster seat, plus <u>both</u> portions of a lap/shoulder belt <i>(except only the lap portion is used with some booster seats equipped with front shield)</i>
Children who meet both criteria below: (1) Their sitting height is high enough so that they can, without the aid of a booster seat: wear the shoulder belt comfortably across their shoulder, and secure the lap belt across their pelvis, <u>and</u> (2) Their legs are long enough to bend over the front of the seat when their backs are against the vehicle seat back	<u>Both</u> portions of a lap/shoulder belt

* To determine whether a particular restraint is appropriate for your child, see restraint manufacturer's recommendations concerning the weight of children who may safely use the restraint.

<p>Part C. Switch for Driver Air Bag. I request authorization for the installation of an on-off switch for the driver air bag in my vehicle. I certify that I or another driver of my vehicle meets the criteria for the risk group checked below. (At least one box must be checked.)</p>	
<input type="checkbox"/>	<p>Medical condition. The driver has a medical condition which, according to his or her physician:</p> <ul style="list-style-type: none"> • causes the driver air bag to pose a special risk for the driver; and • makes the potential harm from the driver air bag in a crash greater than the potential harm from turning off the air bag and allowing the driver, even if belted, to hit the steering wheel or windshield in a crash.
<input type="checkbox"/>	<p>Distance from driver air bag. Despite taking all reasonable steps to move back from the driver air bag, the driver is not able to maintain a 10-inch distance from the center of his or her breastbone to the center of the driver air bag cover.</p>
<p>Part D. Switch for Passenger Air Bag. I request authorization for the installation of an on-off switch for the passenger air bag in my vehicle. I certify that I or another passenger of my vehicle meets the criteria for the risk group checked below. (At least one box must be checked.)</p>	
<input type="checkbox"/>	<p>Infant. An infant (less than 1 year old) must ride in the front seat because:</p> <ul style="list-style-type: none"> • my vehicle has no rear seat; • my vehicle has a rear seat too small to accommodate a rear-facing infant seat; or • the infant has a medical condition which, according to the infant's physician, makes it necessary for the infant to ride in the front seat so that the driver can constantly monitor the child's condition.
<input type="checkbox"/>	<p>Child age 1 to 12. A child age 1 to 12 must ride in the front seat because:</p> <ul style="list-style-type: none"> • my vehicle has no rear seat; • although children ages 1 to 12 ride in the rear seat(s) whenever possible, children ages 1 to 12 sometimes must ride in the front because no space is available in the rear seat(s) of my vehicle; or • the child has a medical condition which, according to the child's physician, makes it necessary for the child to ride in the front seat so that the driver can constantly monitor the child's condition.
<input type="checkbox"/>	<p>Medical condition. A passenger has a medical condition which, according to his or her physician:</p> <ul style="list-style-type: none"> • causes the passenger air bag to pose a special risk for the passenger; and • makes the potential harm from the passenger air bag in a crash greater than the potential harm from turning off the air bag and allowing the passenger, even if belted, to hit the dashboard or windshield in a crash.

Part E. I make this request based on following certification and understandings:	
(Check each box below after reading carefully.)	
<input type="checkbox"/>	Information brochure. I certify that I have read the NHTSA information brochure, "Air Bags & On-Off Switches, Information for an Informed Decision." I understand that air bags should be turned off only for people at risk and turned back on for people not at risk.
<input type="checkbox"/>	Loss of air bag protection. I understand that turning off an air bag may have serious safety consequences. When an air bag is off, even belted occupants may hit their head, neck or chest on the steering wheel, dashboard or windshield in a moderate to serious crash. That possibility may be increased in some newer vehicles with seat belts that are specially designed to work with the air bag. Those belts, which are designed to reduce the concentration of crash forces on any single part of the body, typically allow the occupant to move farther forward in a crash than older belts. Without the air bag to cushion this forward movement, the chance of the occupant hitting the vehicle interior is increased.
<input type="checkbox"/>	Waiver. I understand that motor vehicle dealers and repair businesses may require me to sign a waiver of liability before they install an on-off switch.

Part F. Certification.	
I certify to the U. S. Department of Transportation that the information, certifications and understandings given or indicated by me on this form are truthful, correct and complete to the best of my knowledge and belief. I recognize that the statements I have made on this form concern a matter within the jurisdiction of a department of the United States and that making a false, fictitious or fraudulent statement may render me subject to criminal prosecution under Title 18, United States Code, Section 1001.	
Date	Signature of owner/lessee

Additional instructions and information for vehicle owners and lessees: An owner or lessee of multiple vehicles (e.g., a fleet owner) who wants an on-off switch for the same air bag (e.g., just the passenger air bag) in more than one vehicle and for the same reason does not need to submit a separate form for each vehicle. Instead, the owner or lessee may list the make, model, model year, and vehicle identification number for each of those vehicles and attach the list to a copy of this form. Each page of the list must be signed and dated by the owner or lessee. A list may also be attached to a single copy of this form if the owner or lessee wishes to request authorization for on-off switches for both air bags in multiple vehicles.

Please note that an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. That number appears above.

APPENDIX C TO PART 595--INSTALLATION OF AIR BAG ON-OFF SWITCHES

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INSTALLATION OF AIR BAG ON-OFF SWITCHES	OMB No. 2127-0588 Expiration Date: 11/30/00
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(The form and instructions below will be included in agency letters sent to vehicle owners or lessees authorizing the installation of air bag on-off switches. Each letter will identify the owner or lessee and the vehicle for which installation is authorized.)

The vehicle dealer or repair business identified below made the following installations of on-off switch(es) for the air bags in the motor vehicle identified above:		
Name of motor vehicle dealer or repair business		
Street address		
City	State	Zip Code
On-off switch(es) were installed for the air bag(s) checked on this form:	driver air bag <input type="checkbox"/>	passenger air bag <input type="checkbox"/>
Date of installation	Signature of authorized representative of dealer or repair business	

Instructions for vehicle dealers and repair businesses: Within 7 days of your installation of an on-off switch in the vehicle identified above, you must complete this form and mail it to: National Highway Traffic Safety Administration, Attention: Air Bag Switch Installation Forms, 400 Seventh St., S. W., Washington, D.C. 20590-1000.

Note: An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. That number appears above.

PARTS 596-599 [RESERVED]